under 37 C.F.R. § 1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to our Deposit Account No. 19-0036.

Amendments

In the Claims:

Please cancel claims 5, 17, 23, and 27 without prejudice or disclaimer.

Please amend the claims as follows:

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22. (once amended) The WLAN device of claim 1, wherein said transmitter receives an information signal, wherein said information signal comprises an I baseband signal and a Q baseband signal, wherein said transmitter comprises:

(1) a first modulator that receives said I baseband signal and outputs a modulated I phase signal;

(2) a second modulator that receives said Q baseband signal and outputs a modulated Q phase signal;

(3) first differential sampling means for sampling said modulated I phase signal according to a first control signal and a second control signal, to generate an I harmonically rich signal, wherein said second control signal is phase shifted relative to said first control signal;

(4) second differential sampling means for sampling said modulated Q phase signal according to said first control signal and said second control signal, to generate a Q harmonically rich signal;

(5) means for combining said I harmonically rich signal and said Q harmonically rich signal, to generate an I/Q harmonically rich signal, said I/Q harmonically rich signal having multiple harmonic images that contain amplitude and frequency information for reconstruction of the I and Q phase signals;

wherein said first and second control signals have a period of T_S so that said harmonic images repeat at multiples of $1/T_S$;

wherein said first and second control signal comprise pulses that operate to improve energy transfer to a desired harmonic image in said corresponding I and Q harmonically rich signals; and

wherein said output RF signal comprises said I/Q harmonically rich signal.

24. (once amended) The WLAN device of claim 1, wherein said transmitter receives an information signal, wherein said transmitter comprises:

a modulator that receives said information signal and outputs a modulated signal;

a buffer/inverter, for receiving said modulated signal and generating an inverted modulated signal;

a first controlled switch, coupled to an output of said buffer/inverter, said first controlled switch shunting said modulated signal to ground according to a first control signal, and resulting in a first harmonically rich signal;

a second controlled switch coupled to a second output of said buffer/inverter, said second controlled switch shunting said inverted modulated signal to ground according to a second control signal, and resulting in a second harmonically rich signal;

a combiner, coupled to an output of said first controlled switch and an output of said second controlled switch, said combiner combining said first harmonically rich signal and said second harmonically rich signal, resulting in a third harmonically rich signal;

wherein said first control signal and said second control signal comprise pulses that operate to improve energy transfer to a desired harmonic in said third harmonically rich signal;

wherein said first control signal and said second control signal are phase shifted with respect to each other; and

wherein said output RF signal comprises said third harmonically rich signal.